REMARKS

Upon entry of the amendment, claims 10 and 12 are all the elected claims pending in the application.

Claims 10 and 12 have been amended. Claims 10 and 12 have been amended in response to the Examiner's rejections to eliminate the term "general" from the recitations, to add the definition of "n" in formulas 9 and 10 as being an integer selected from 1 to 3, and to include the recitation that "the second intermediate represented by formula (10) is obtained as crystals." No new matter has been added.

Applicants are in receipt of the initialed PTO Form 1449 filed February 14, 2003. However, the citation for U.S. Patent 3,836,541, was not initialed. The Examiner is respectfully requested to provide a supplemental form with this reference properly initialed.

Claims 10 and 12 are rejected under 35 U.S.C. 112, second paragraph as being indefinite.

In response, Applicants have amended claims 10 and 12 by eliminating the term "general" from the recitations. Claims 10 and 12 have been further amended to add the definition of "n" in formulas 9 and 10 as being an integer selected from 1 to 3. This amendment is based on the range from the descriptions of specific metal atoms in page 40, lines 11 to 18 of the specification. No new matter has been added. Applicants submit that the claims are no longer indefinite and respectfully request that this rejection be withdrawn.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takiguchi et al. (JP 50 14631) in view of Fu et al. (U.S. 4,659,853).

In response, Applicants respectfully traverse.

The present invention claims a method for preparing a compound represented by formula (2), in which R^6 represents an alkyl group having at least 3 carbon atoms, wherein the method has the steps of: [1] obtaining a first intermediate (8) by adding a derivative (7) to compounds (5) and (6); [2] obtaining a crystal second intermediate (10) from the first intermediate (8) and a compound (9); and [3] obtaining the compound (2) from the second intermediate (10). According to the present invention, the compound (2) having a high purity can be obtained with a high efficiency without a purifying step, since the second intermediate (10) is obtained in the step [2] in a sufficiently pure (crystal) condition.

The Examiner seems to state that Takiguchi teaches the above steps [2] and [3]. Although Takiguchi may teach the uses of compounds (11) and (12), Takiguchi fails to teach the step [2] to obtain the pure second intermediate (10). Because of the lack of the step [2], the method of Takiguchi requires a final purifying step (such as recrystallization, a distillation under reduced pressure, or column chromatography, as are described in line 18 in the upper-left column to line 2, upper-right column in page 3 of Takiguchi) in order to obtain products having a sufficient purity.

Applicants note that the method of Takiguchi would work when the final product is a compound represented by formula (2) in which R^6 represents a low molecular weight alkyl group having 1 or 2 carbon atoms (such as a methyl group or an ethyl group, as are taught in examples of Takiguchi), however, the method of Takiguchi is not practically applicable when the final product has 3 or more of carbon atoms of R^6 because of inability to obtain the products resulting from difficulty in the final purifying step.

As is described above, since Takiguchi fails to disclose obtaining the second intermediate (10), Takiguchi neither teaches nor suggests the method of the present invention that achieves a high efficiency in obtaining the compound represented by formula (2) in which R^6 represents an alkyl group having at least 3 carbon atoms that is difficult to purify.

It is asserted that Fu teaches the step [1] of the present invention since Fu teaches to obtain (8) by reacting (5), (6) and (7). However, the step [1] is different from Fu in view of the chemical reactions. In the step [1] of the present invention, the compound (7) is added to a combination of (5) and (6) (namely, a reaction product (an isothiocyanatoformic acid ester) formed by the reaction between (5) and (6): in detail, please refer to page 39, line 21 to page 40, line 5 of the specification of the present invention.) In contrast, Fu does not disclose the recited order of chemical reactions. The top of column 2 of Fu teaches reactions in which (7) and (5) are reacted at first to obtain an intermediate compound (ROCONCS), and then the compound (6) is reacted with the intermediate compound.

For at least the foregoing reasons Takiguchi and Fu do not suggest the claimed invention either separately or in combination. Therefore it is respectfully requested that the rejection be reconsidered and withdrawn.

However, to advance prosecution of Applicants' claims, Applicants have amended claims 10 and 12 to incorporate the feature that the second intermediate represented by formula (10) is obtained as crystals. This amendment is based on page 41, line 12 of the specification. No new matter has been added.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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